

CR30 MicroTurbine Renewable Fuels



Achieve ultra-low emissions and reliable electrical generation from waste gas.

- Years of renewable experience
- Ultra-low emissions
- Operates on landfill or digester gas
- One moving part: Minimal maintenance and downtime
- Patented air bearing: No lubricating oil or coolant
- 5 and 9 year Factory Protection Plans available
- Remote monitoring and diagnostic capabilities
- Integrated utility synchronization and protection⁽¹⁾
- Small, modular design allows for easy, low-cost installation
- Reliable: Tens of millions of run hours and counting



CR30 MicroTurbine

Electrical Performance⁽²⁾

Electrical Power Output	30kW
Voltage	400 to 480 VAC
Electrical Service	3-Phase, 4 wire
Frequency	50/60 Hz
Maximum Output Current	46A, grid connect operation
Electrical Efficiency LHV	26%

Fuel/Engine Characteristics⁽²⁾

Digester/Landfill Gas HHV	13.0 MJ/m ³ to 47.5 MJ/m ³ (350 to 1,275 BTU/scf)
H ₂ S Content	< 70,000 ppmv
Inlet Pressure – HHV dependent	552 kPa gauge (80 psig) @ 13.0 MJ/m ³ (350 BTU/scf) 517 kPa gauge (75 psig) @ 15.8 MJ/m ³ (425 BTU/scf) 483 kPa gauge (70 psig) @ 24.2 MJ/m ³ (650 BTU/scf) 448 kPa gauge (65 psig) @ 31.7 MJ/m ³ (850 BTU/scf)
Fuel Flow HHV	457 MJ/hr (433,000 BTU/hr)
Net Heat Rate LHV	13.8 MJ/kWh (13,100 BTU/kWh)

Exhaust Characteristics⁽²⁾

NO _x Emissions @ 15% O ₂ ⁽³⁾	9 ppmvd (18 mg/m ³)
Nox/Electrical Output ⁽³⁾	0.22 g/bhp-hr (0.64 lb/MWhe)
Exhaust Gas Flow	0.31 kg/s (0.69 lbm/s)
Exhaust Gas Temperature	275°C (530°F)

Reliable power when and where you need it. Clean and simple.

Dimensions & Weight⁽⁴⁾

Width x Depth x Height	0.76 x 1.5 x 1.9 m (30 x 60 x 77 in)
Weight	405 kg (891 lb)

Minimum Clearance Requirements⁽⁵⁾

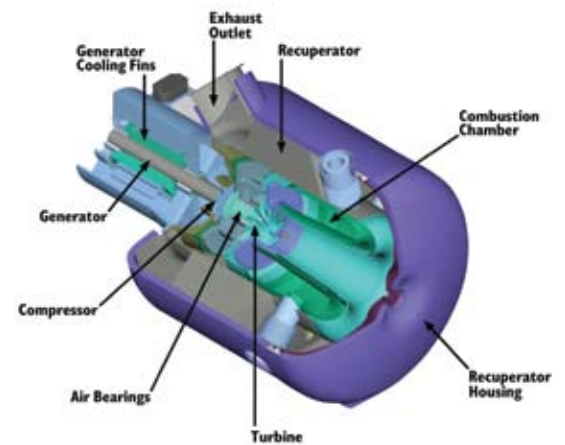
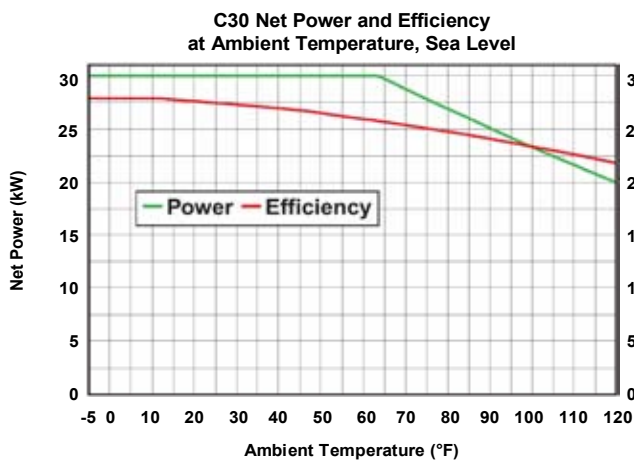
Vertical Clearance	0.61 m (24 in)
Horizontal Clearance	
Left & Right	0.76 m (30 in)
Front	0.93 m (37 in)
Rear	0.92 m (36 in)

Sound Levels

Acoustic Emissions at Full Load Power	
Nominal at 10 m (33 ft)	65 dBA

Certifications

- Models available with optional equipment for CE Marking



- (1) Some utilities may require additional equipment for grid interconnectivity
 - (2) Nominal full power performance at ISO conditions: 59°F, 14.696 psia, 60% RH
 - (3) For surrogate landfill and digester gases. Please contact Capstone for additional details
 - (4) Approximate dimensions and weights
 - (5) Clearance requirements may increase due to local code considerations
- Specifications are not warranted and are subject to change without notice.*

